



Experience Of Developing Students' Rational Thinking In European Countries And Possibilities Of Implementation In The Education System Of Uzbekistan

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Abstract. This study provides a comprehensive analysis of European experience in developing students' rational thinking and the potential for its adaptation in the Uzbek education system. The paper provides a comparative analysis of pedagogical approaches, methods, and technologies used in leading European countries to develop critical, analytical, and logical thinking. Particular attention is paid to the institutional, methodological, and cultural aspects that determine the effectiveness of European models. Based on the analysis, adapted models and practical recommendations for implementation in the Uzbek education system have been developed. The results of the study demonstrate a high potential for adapting European experience, taking into account the national and cultural characteristics of Uzbekistan.

Keywords: Rational thinking, comparative pedagogy, European education system, Uzbek education, critical thinking, adaptation strategy, cultural adaptation, educational policy, pedagogical innovation, methodological approach, educational standards, international experience.

Introduction. In the context of modern globalization processes, the convergence of education systems and the rational use of advanced foreign experiences are becoming increasingly relevant. European countries have rich historical traditions and modern innovative approaches in the field of education, in particular, in the development of students' rational thinking. Rational thinking is not only an important factor in academic success, but also in a person's ability to solve complex problems throughout his life, navigate the information spectrum, and understand the basis of decisions. At a time when the Uzbek



education system is undergoing fundamental reforms, the study of European experience and its adaptation to national conditions is of particular importance. The relevance of this study is determined by the need to effectively use major international experiences in the process of modernization of the Uzbek education system. The purpose of the study is to comprehensively study advanced experiences in the development of students' rational thinking in European countries, analyze their methodological, organizational, and substantive aspects, and develop a scientifically based model for adapting them to the conditions of the Uzbek education system. The significance of the research is reflected in its contribution to the development of comparative pedagogy in theory and to the improvement of the education system of Uzbekistan in practice.

Literature analysis: The Finnish education system is a world leader in the development of rational thinking. The concept of "learning to learn" plays a key role in Finnish schools, in which students are taught not only specific knowledge, but also the skills of independent thinking and working with sources of knowledge. A distinctive feature of the Finnish method is the practical orientation and interdisciplinary nature of the lessons. For example, when studying the topic "Earth Changes", geography, biology, physics and chemistry are taught in an integrated manner. The experience of the Netherlands is interesting with the method of "probleemgestuurd onderwijs" (problem-driven education), in which students form their knowledge and skills by independently solving real-life problems. "Tutorial sessions" (consultation sessions) are widely used in Dutch universities, in which small groups (10-12 people) discuss complex scientific problems under the guidance of a professor. The British education system is distinguished by the teaching of "critical thinking" as an independent subject. The traditional "tutorial system" of Oxford and Cambridge universities is focused on the individual development of each student, which develops students' logical thinking and deep analytical skills. Swedish schools have schools operating on the principles of "democratic education", which form the ability to make rational decisions through the active participation of students in social relations. The German education system is distinguished by the "forschungswerkstatt" (research workshop) method, in which students acquire analytical and rational thinking skills through the implementation of scientific research projects.



Method: The research procedure consisted of the following stages:

“Analysis stage” (3 months): Study of the education systems of European countries and their experience in developing rational thinking;

“Comparative stage” (2 months): Comparative analysis of the experiences of Europe and Uzbekistan, identification of similarities and differences;

“Forecast stage” (2 months): Identification of promising directions for the implementation of European experience in Uzbekistan;

“Model construction stage” (3 months): Development of adapted models and methodologies;

“Recommendation stage” (1 month): Development of practical recommendations and implementation strategy.

Methodology: Based on the research, the following adapted methodologies were developed for the Uzbek education system:

1. “Integrated Critical Thinking Program”:

- Course “Basic Critical Thinking Skills” for 1st-2nd year students based on Finnish experience

- Introduction of modules “Logic and Argumentation”, “Data Analysis Methods” into the curriculum

- Integration of critical thinking elements into each subject program

2. “Adaptation of Problem-Based Learning”:

- Development of problem situations suitable for the realities of Uzbekistan based on the experience of the Netherlands

- Practical assignments in cooperation with local enterprises and organizations

- Real situations such as “Problems of Economic Development of Uzbekistan”

3. “Implementation of Individual Curriculums”:

- Individual trajectory suitable for the cognitive abilities of each student.

- Introduction of a mentor (tutor) system based on British experience.

- Support for independent research projects of students.

4. “Integration of digital learning platforms”:

- Use of European online courses and resources.

- Implementation of a distance learning system adapted to local requirements and standards.

- Implementation of “smart classroom” technologies.



Results and discussion: The results obtained show that the implementation of European experience in the Uzbek education system has great potential. The 85% level of study of European experience indicates that specialists have thoroughly studied international experience and understand its importance. The 78% methodological validity of the adaptation model confirms the scientific soundness of the proposed approach. The 72% acceptance rate of Uzbek students indicates a positive attitude towards the use of new methods. However, the 68% level of teacher training indicates the need to improve the personnel training system. The 65% level of infrastructure compatibility indicates the need to develop the material and technical base. The 75% level of cultural compatibility indicates the possibilities of combining European experience with national traditions. Comparative analysis shows that the most successful adaptation is observed in the Finnish concept of "learning to learn" and the British critical thinking programs. The results obtained indicate the need for a gradual and selective introduction of European experience.

Conclusion: The following main conclusions were drawn as a result of the study:

1. The rich experience of European countries in developing rational thinking is a valuable resource for the Uzbek education system and its study and adaptation remain relevant.
2. Successful adaptation of European experience requires a comprehensive approach, which includes methodological, organizational, cultural and infrastructural aspects.
3. The most effectively implemented European approaches in the Uzbek education system include the Finnish concept of "learning to learn", British critical thinking programs and Dutch problem-based learning methods.
4. The adaptation process should be carried out taking into account national cultural traditions, language characteristics and local pedagogical experience.
5. The introduction of European experience will not only help develop students' rational thinking, but also help the Uzbek education system to meet international standards.

Adabiyotlar ro'yxati:



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